[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2021-0664; Project Identifier AD-2021-00158-T; Amendment

39-21938; AD 2022-03-21]

RIN 2120-AA64

**Airworthiness Directives; The Boeing Company Airplanes** 

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain The Boeing Company Model 787-8, 787-9, and 787-10 airplanes. This AD was prompted by significant changes, including new or more restrictive requirements, made to the airworthiness limitations (AWLs) related to fuel tank ignition prevention and the nitrogen generation system. This AD requires revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet https://www.myboeingfleet.com. You may view this service

information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0664.

## **Examining the AD Docket**

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0664; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Tak Kobayashi, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA; phone: 206-231-3553; email: Takahisa.Kobayashi@faa.gov.

#### **SUPPLEMENTARY INFORMATION:**

#### Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 787-8, 787-9, and 787-10 airplanes. The NPRM published in the *Federal Register* on October 6, 2021 (86 FR 55538). The NPRM was prompted by significant changes, including new or more restrictive requirements, made to the AWLs related to fuel tank ignition prevention and the nitrogen generation system. In the NPRM, the FAA proposed to require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA is issuing this AD to address ignition sources inside the fuel tanks and increased flammability exposure of the fuel tanks caused

by latent failures, alterations, repairs, or maintenance actions, which could result in a fuel tank explosion and consequent loss of an airplane.

#### **Discussion of Final Airworthiness Directive**

#### Comments

The FAA received comments from the Air Line Pilots Association, International (ALPA) and United Airlines who supported the NPRM without change.

The FAA received additional comments from two commenters, including Boeing and American Airlines (AA). The following presents the comments received on the NPRM and the FAA's response to each comment.

#### Request to Clarify Applicability

Boeing asked for clarification that the applicability specified in the proposed AD is the same as the effectivity specified in the referenced service information. Boeing stated that the effectivity in the service information mandated by the proposed AD does not apply to Model 787-8 airplanes having line numbers 1 through 5.

The FAA agrees that this AD does not apply to Model 787-8 airplanes having line numbers 1 through 5. The FAA has changed paragraph (c) of this AD accordingly.

## Request to Clarify Applicability for AWL No. 57-AWL-13

Boeing and AA asked for clarification that the initial compliance time specified in paragraph (g)(11)(ii)(B) of the proposed AD is applicable only to Model 787 airplanes having line numbers 10, 13, and 15 through 19 inclusive. Boeing stated that AWL No. 57-AWL-13 explicitly identifies those specific line numbers instead of referring to Boeing Service Bulletin B787-81205-SB570030-00. AA stated that for airplanes not included in the effectivity of the referenced service bulletin, operators could misinterpret

the actions required by paragraph (g)(11)(ii)(B) for those airplanes, regardless of the applicability specified in AWL No. 57-AWL-13.

The FAA agrees that the initial compliance time specified in paragraph (g)(11)(ii)(B) of this AD is applicable only to Model 787 airplanes having line numbers 10, 13, and 15 through 19 inclusive. The FAA has revised paragraph (g)(11)(ii)(B) accordingly.

## Request to Clarify Applicability in Airworthiness Limitation Instruction (ALI)

Boeing asked for clarification that the initial compliance time for performing an inspection in accordance with each ALI task specified in paragraphs (g)(1) through (14) of the proposed AD is applicable only to the airplanes specified in the applicability of each ALI task. Boeing also asked for clarification that the proposed AD does not supersede the applicability of the ALI tasks. Boeing stated that each ALI task has a unique applicability, and some of these tasks only apply to a subset of the airplanes affected by the proposed AD.

The FAA agrees to provide clarification. This AD requires incorporation of the service information into the maintenance or inspection program. After this action is done, compliance with each ALI or critical design configuration control limitation (CDCCL) task incorporated into the maintenance or inspection program is required by the operating rules in 14 CFR 91.403(c) and 43.16. This AD does not change or supersede any ALI or CDCCL task or its applicability. Compliance is based on the applicability specified in each ALI or CDCCL task. Therefore, the FAA has not changed this AD in this regard.

## Request to Clarify "Recent Inspection"

Boeing asked for clarification regarding a recent inspection referenced in the sub-paragraphs to paragraphs (g)(1) through (14) of the proposed AD. Boeing asked that the FAA clarify that a recent inspection performed on an airplane can be the inspection done in accordance with an ALI task of the existing maintenance or inspection program

applicable to that airplane. Boeing stated that without clarification, its interpretation is that the initial inspections are required to be performed in accordance with the ALI tasks provided in the service information mandated by paragraph (g) of the AD.

The FAA agrees to provide clarification. The initial compliance time specified in the sub-paragraphs to paragraph (g)(1) through (14) of this AD is the compliance time to perform the first inspection in accordance with each ALI task, after incorporation of the service information into the maintenance or inspection program as required by paragraph (g) of this AD. The "most recent" inspection referenced in those paragraphs is the inspection performed in accordance with an ALI task of the operator's existing maintenance or inspection program prior to incorporation of the service information mandated by paragraph (g) of this AD. Certain ALI tasks from the same or earlier revisions of the service information mandated by paragraph (g) of this AD should already exist in the maintenance or inspection program. The requirements of paragraphs (g)(1) through (14) of this AD are intended to address the transition to the ALI tasks after accomplishment of the actions required by paragraph (g) of this AD, without disrupting the existing inspection intervals. Therefore, the FAA has not changed this AD in this regard.

## **Request to Extend Compliance Time**

Boeing asked that the compliance time to revise the maintenance/inspection program required by paragraph (g) of the proposed AD be changed from 180 to 240 days. Boeing stated that the majority of the inspections require entry into a wet fuel cell to access and possibly repair structural sealant applications, at unique facilities and with significant aircraft downtime. Boeing added that an extension of the compliance time to 240 days would allow additional flexibility to operators. Boeing also asked whether an initial inspection done within 180 days after the effective date of the AD must be performed in accordance with the service information mandated by this AD or if it is

allowed to be performed under the existing maintenance or inspection program applicable to that airplane. Boeing stated that performing the initial inspection within 180 days after the effective date of the AD seems to conflict with the requirement to revise the maintenance or inspection program within 180 days after the effective date of the AD.

The FAA does not agree to extend the compliance time to revise the maintenance/inspection program required by paragraph (g) of this AD from 180 to 240 days because the FAA has determined that this compliance time is adequate for operators to incorporate maintenance or inspection program changes for their affected fleet. The 180-day compliance time required by paragraph (g) is unrelated to the initial compliance time for performing the inspections in accordance with each ALI task specified in the service information mandated by this AD. Paragraph (g) requires incorporation of the service information into the maintenance or inspection program within 180 days after the effective date of this AD. Once the maintenance/inspection program has been revised, compliance with each ALI or CDCCL task of the maintenance or inspection program is required by the operating rules in 14 CFR 91.403(c) and 43.16. For clarification, the initial compliance time to perform an inspection after incorporation of the service information into the maintenance or inspection program is specified in paragraphs (g)(1) through (14) of this AD. Therefore, the FAA has not changed this AD in this regard.

# Request to Add Revision Level to a Certain Service Bulletin Reference

AA asked that the FAA specify the revision level of Boeing Service Bulletin B787-81205-SB570030-00, referenced in paragraph (g)(11)(ii)(A) of the proposed AD. AA stated that specifying the revision level of the service bulletin will reduce any ambiguity for the requirements associated with that revision level.

The FAA does not agree to include the revision level of Boeing Service Bulletin B787-81205-SB570030-00. Including the revision level of the referenced service bulletin could potentially conflict with another AD that mandates that service bulletin. Boeing

Service Bulletin B787-81205-SB570030-00, Issue 001, dated March 17, 2017, is required by AD 2018-11-13, Amendment 39-19301 (83 FR 25894, June 5, 2018) (AD 2018-11-13). If a later revision of that service bulletin is issued in the future as an (alternative method of compliance) AMOC to AD 2018-11-13, the actions in the later revision can be done equivalent to Issue 001. Specifying "Issue 001 or later" in paragraph (g)(11)(ii)(A) of this AD would make it consistent with the requirements in AD 2018-11-13; however, if AD 2018-11-13 must be superseded to mandate a later revision of the service bulletin, this AD would also have to be superseded if the revision level of the service bulletin is specified. Therefore, the FAA has determined that the revision level of the referenced service bulletin will not be included in this AD, and has not changed this AD in this regard.

#### **Conclusion**

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

## Related Service Information under 1 CFR Part 51

The FAA reviewed Boeing 787 Special Compliance Items/Airworthiness

Limitations, D011Z009-03-04, dated August 2018. This service information specifies

AWLs that include ALIs and CDCCLs related to fuel tank ignition prevention and the nitrogen generation system. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

#### **Costs of Compliance**

The FAA estimates that this AD affects 121 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

The FAA has determined that revising the existing maintenance or inspection program takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the FAA estimates the average total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the

national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive: **2022-03-21 The Boeing Company**: Amendment 39-21938; Docket No. FAA-2021-0664; Project Identifier AD-2021-00158-T.

#### (a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### (b) Affected ADs

This AD affects AD 2018-11-13, Amendment 39-19301 (83 FR 25894, June 5, 2018) (AD 2018-11-13).

#### (c) Applicability

This AD applies to The Boeing Company Model 787-8, 787-9, and 787-10 airplanes, certificated in any category, having line numbers (L/Ns) 6 through 871 inclusive, excluding L/N 688; and L/Ns 873, 875, 877, 878, 879, 881, and 883.

## (d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

## (e) Unsafe Condition

This AD was prompted by significant changes, including new and more restrictive requirements, made to the airworthiness limitations (AWLs) related to fuel tank ignition prevention and the nitrogen generation system. The FAA is issuing this AD to address ignition sources inside the fuel tanks and increased flammability exposure of the fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which could result in a fuel tank explosion and consequent loss of an airplane.

## (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

## (g) Maintenance or Inspection Program Revision

Within 180 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in Sections C through F of Boeing 787 Special Compliance

Items/Airworthiness Limitations, D011Z009-03-04, dated August 2018. The initial compliance time for doing the airworthiness limitation instruction (ALI) tasks specified in Sections C through F of Boeing 787 Special Compliance Items/Airworthiness

Limitations, D011Z009-03-04, dated August 2018, as applicable for each airplane, is at the times specified in paragraphs (g)(1) through (14) of this AD.

(1) For AWL No. 28-AWL-89, "Fuel Quantity Data Concentrator (FQDC) Bracket Inspections," at the applicable time in paragraph (g)(1)(i) or (ii) of this AD.

- (i) For airplanes on which an inspection was performed as specified in AWL No. 28-AWL-89: Within 5 years or 10,000 flight cycles, whichever occur first after the most recent inspection was performed as specified in AWL No. 28-AWL-89.
- (ii) For airplanes on which no initial inspection was performed: Within 5 years or 10,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (2) For AWL No. 57-AWL-01, "Edge and Fillet Seals at Stringer and Spar Locations (Zone 2)," at the applicable time in paragraph (g)(2)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-01: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-01.
- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (3) For AWL No. 57-AWL-02, "Fasteners on Bare Carbon Fiber Reinforced Plastic (CFRP) Stripes," at the applicable time in paragraph (g)(3)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-02: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-02.
- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.

- (4) For AWL No. 57-AWL-03, "Head-in-tank Thin-Sleeved Interference-Fit Fasteners with Heads in the Fuel Tank" at the applicable time in paragraph (g)(4)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-03: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-03.
- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (5) For AWL No. 57-AWL-05, "Titanium Collars BACC30CT Fasteners (Clearance Fit)." at the applicable time in paragraph (g)(5)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-05: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-05.
- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (6) For AWL No. 57-AWL-06, "Titanium Collars BACC30CY Collars (Interference-Fit with Swaged Collars)" at the applicable time in paragraph (g)(6)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-06: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-06.

- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (7) For AWL No. 57-AWL-07, "Tension-rated Bolt Locations at Side of Body (SOB) and Nacelle Fittings" at the applicable time in paragraph (g)(7)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-07: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-07.
- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (8) For AWL No. 57-AWL-08, "Dielectric Top on Wing Surface," at the applicable time in paragraph (g)(8)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-08: Within 6 years or 12,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-08.
- (ii) For airplanes on which no initial inspection was performed: Within 6 years or 12,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (9) For AWL No. 57-AWL-09, "Inspection Requirements for Class 1A Seal Installations created as a result of Boeing Material Review Board," at the applicable time in paragraph (g)(9)(i) or (ii) of this AD.

- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-09: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-09.
- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (10) For AWL No. 57-AWL-10, "Inspection Requirements for In-Tank Fasteners near Side of Body (SOB) Rib and between Ribs 7 and 18," at the applicable time in paragraph (g)(10)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-10: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-10.
- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (11) For AWL No. 57-AWL-13, "Inspection Requirements for In-Tank Fasteners and Edge Seal near Disbond Arrestment (DBA) Fastener Installations in Lightning Zone 2," at the applicable time in paragraph (g)(11)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-13: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-13.
- (ii) For airplanes on which no initial inspection was performed: At the applicable time in paragraph (g)(11)(ii)(A) or (B) of this AD.

- (A) For airplanes on which Boeing Service Bulletin B787-81205-SB570030-00 is applicable: Within 12 years or 24,000 flight cycles, whichever occurs first after the incorporation of Boeing Service Bulletin B787-81205-SB570030-00.
- (B) For airplanes having line numbers 10, 13, and 15 through 19 inclusive: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (12) For AWL No. 57-AWL-14, "Supplemental Inspection Requirements for Precured Sealant Caps, Fillet Seals, and Edge Seals associated Stringer Splice Fitting Installation located at Right Wing Upper Panel Stringer No.3, just Outboard of the Side of Body Rib," at the applicable time in paragraph (g)(12)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-14: Within 12 years or 24,000 flight cycles whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-14.
- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (13) For AWL No. 57-AWL-15, "Inspection Requirements for Pre-cured Sealant Caps, Injection Seals, Fillet Seals, and Edge Seals associated with the Wing Lower Panel Stringer Attachments to the Lower Side of Body (SOB) Chord," at the applicable time in paragraph (g)(13)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-15: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-15.

- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.
- (14) For AWL No. 57-AWL-16, "Supplemental Inspection Requirements for Edge Seals located at Left Wing Upper Panel Stringer No. 19, Between Ribs 8 and 9," at the applicable time in paragraph (g)(14)(i) or (ii) of this AD.
- (i) For airplanes on which an inspection was performed as specified in AWL No. 57-AWL-16: Within 12 years or 24,000 flight cycles, whichever occurs first after the most recent inspection was performed as specified in AWL No. 57-AWL-16.
- (ii) For airplanes on which no initial inspection was performed: Within 12 years or 24,000 flight cycles, whichever occurs first after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.

# (h) No Alternative Actions, Intervals, or Critical Design Configuration Control Limitations

After the existing maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections), intervals, or critical design configuration control limitation (CDCCLs) may be used unless the actions, intervals, and CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j) of this AD.

#### (i) Terminating Actions

Accomplishment of the revision required by paragraph (g) of this AD terminates the requirements specified in paragraph (h) of AD 2018-11-13, for Model 787-8 airplanes only.

# (j) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in Related Information. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

#### (k) Related Information

For more information about this AD, contact Tak Kobayashi, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA; phone: 206-231-3553; email: Takahisa.Kobayashi@faa.gov.

#### (I) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) Boeing 787 Special Compliance Items/Airworthiness Limitations,D011Z009-03-04, dated August 2018.
  - (ii) [Reserved]
- (3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet https://www.myboeingfleet.com.
- (4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, fr.inspection@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

  Issued on January 28, 2022.

Lance T. Gant, Director, Compliance & Airworthiness Division, Aircraft Certification Service.